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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,591	07/24/2001	Clement G. Taylor	DIVA/151CON1	4923

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EXAMINER

GECKIL, MEHMET B

ART UNIT PAPER NUMBER

2142

DATE MAILED: 06/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/911,591

Applicant(s)

TAYLOR ET AL.

Examiner

Mehmet B. Geckil

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 2-13 is/are allowed.  
6) ☒ Claim(s) 14-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

1. Claims 2-18 are presented for examination.
2. Claims 14-18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite because the following language in claim 14 is not clear:  
a) "which server module has associated with it a including requested data." It is not clear to Examiner what this claim language is trying to say. Applicant should not use pronouns in the claims. Also, claim language should be crystal clear and should flow. In this instance it is clear that there is a problem with the flow and clarity.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanai et al.

5. Kanai et al (5,862,403) taught the invention substantially as claimed including a storage server comprising a plurality of server modules or disk control units (figure 6 element 4, column 12 lines 53-58), a plurality of storage devices (2) each of the storage devices (2) coupled to exactly one of the modules (4), and a cross bar switch couples to the server modules, where the server modules accept data requests from a plurality of clients, each of the server modules issues data retrieval commands only to the storage devices coupled to each specific server module, and the cross bar switch routes data from the server modules to the clients requesting the data (see column 12 lines 11- 68, column 13 line 1 et seq, e.g., see striping at column 13 line 9 et seq and column 14 line 50 et seq and see cross bar switch at column 18 line 4 et seq.)

6. It would have been obvious to one of ordinary skill in the network data storage server art at the time of the invention that the claimed invention differed from the teachings of Kanai et al only by a degree, e.g., Kanai et al did not state that each of the server modules contained a processor and a buffer but they taught that disk controllers or server modules were SCSI controllers and it is well known that SCSI controllers contains a processor and a buffer (examiner uses Adaptec SCSI controller in his workstation and Adaptec SCSI controller includes a processor on the SCSI controller card and buffers. Also, Adaptec scsi controllers attaché to the storage devices through a bi-directional scsi bus or channel or loop, though end of the loop is terminated ) Other features are all obvious variations of the well known features of the raid controllers, highly available storage servers and networking art, e.g., Kanai et al taught MPEG video data (column 14 lines 61-68, and column 29 line 30 et seq) and fiber channel (column

44 lines 24-29.) As to the routing feature, Kanai taught using cross bar switches therefore routing is the inherent features of the crossbar switches. It is suggested that in order to advance the prosecution of the application to a successful allowance stage in response to this office action applicant should amend the claim 14 with the features of claim 2, i.e., server controller and head-end features.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Claims 2-13 are allowable over the prior art record.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehmet Geckil whose telephone number is (703) 305-

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9676. The examiner can normally be reached on Monday through Friday from 6:30 A.M. to 3:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Jack Harvey, can be reached on (703) 305-9705. The fax phone numbers for the organization where this application or proceeding is assigned are listed hereinbelow.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800/4700. Customer service number is (703) 306-5631.

**Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**or faxed to:**

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Fourth Floor (Receptionist).

06/16/04

MEHMET B. GECKIL  
PRIMARY EXAMINER

